

Amendments to the Specification

Please amend the specification as follows:

[003] A rotary apparatus, apparatus adapted to perform as, as compressor, pump, motor, metering device or an internal combustion engine comprising of two identical vanes, two hollow cylindrical sleeves, hollow cylindrical liner, cams and associated linkages, couplings, shaft, clutch and braking arrangement; said vanes are fitted on to the curved surface of the sleeves, one vane on each sleeve, such that the vanes are radial to sleeve's curved surface and at one of the ends of each sleeve in such a way that half of the vane's surface protrudes out of the sleeve's end; and the said ends, fitted with vanes are placed adjacent, with vanes angularly displaced so that said the vanes are displaced from each other by a defined angle at all times; said the sleeves so placed that their axis, the one passing through the center of their end surfaces, lay on one line; said the curved surfaces where the vanes are attached on the sleeves, is such that it allows rotation of the adjacent vane and sleeve, about the said axis; a liner is provide provided; said the liner along with the sleeve surface-to form an enclosure; said the liner's inner surface is contoured along the path traced by vane edge while rotating about the-said axis; said the vanes divide the-said enclosure formed inside the liner into two sealed chambers and the enclosure is sealed from spaces outside the enclosure; said the two sleeves, sleeves are coupled and uncoupled with-with a shaft by means of coupling arrangement actuated by same cams; said the cams actuate said the braking arrangement such that each vane is held at a predetermined position alternately, and the vanes are free to rotate through an_a defined angle alternately; said the cams allows allow both vanes to rotate simultaneously through an_a redefined angle and defines the angle by which the vanes are separated, rotated simultaneously or independently.

Replace the section Brief Description of the Drawings with the following:

Brief Description of the Drawings

Fig 1-shows simplified fig. depicting elevation and side view of sleeve.

Fig 2-shows simplified fig. depicting elevation and side view of liner.

Fig 3-shows simplified fig. depicting elevation and side view of the vane.

Fig 4-shows simplified fig. depicting the vane and sleeve fitting.

Fig 5-shows simplified fig. depicting liner, vane, and sleeve assembly.

Fig 6-shows the simplified fig. depicting line diagram of liner, vane and sleeve.

Fig 7-shows the simplified fig. depicting v1 and v2 at initial position with an inclusive angle of 2 alpha between them.

Fig 8-shows the simplified fig. depicting line diagram of initial movement of v1.

Fig 9-shows the simplified fig. depicting line diagram with v1 at position z.

Fig 10-shows the simplified fig. depicting line diagram with v1 and v2 at position Y and position X respectively.

Fig 11-shows the simplified fig. depicting v1 and v2 moving simultaneously from position Y and position Z respectively.

Fig 12-shows the simplified fig. depicting v2 and v1 at position Y and position X respectively (initial position).

Fig 13-shows simplified fig. depicting shaft placed in hollow annular space of the sleeve.

Fig 13a-shows a simplified fig. of the cams fitted on sleeves.

Fig 13b-shows line diagram of a typical vane positioning CAM.

Fig 14-shows the sliding friction clutch.

Fig 17 to Fig. 23-shows the various steps of apparatus working as single stroke IC engine. a)Ex V-Exhaust valve b)SuV-Suction valve.

Fig. 24 to Fig. 31-shows the various steps when apparatus working as Two stroke IC engine.
a)E1, E2-Exhaust Valves c)Su1, Su2- Suction valves.

Fig 32a-shows different view of cam operating suction valve and exhaust valve of single stroke IC engine.

Fig 32b-shows outline fig. of cams operating valves and cams for positioning vanes, fitted on sleeve.

Fig 33-shows different view of cam operating valves for two stroke engine a) PrS-Profile for suction valve. b)PrE-Profile for exhaust valve.

Fig 34-shows sleeve without depression. a) CSF-Curved surface.

Fig. 35-shows a sleeve with depression b) st-step on sleeve c) Flo-cooling fluid outlet hole d) Rcf-receiving cone for sliding friction clutch. e) Fli-cooling fluid inlet line f) DPr-depression

Fig. 36-shows vane a) stvs-strip to fit vane on sleeve b) Pis-Piston c)Grps-groove for fitting piston rings.

Fig. 37-shows liner. a) SOII-split on outer half. b) PKV-pocket for valve. c) OH capital-outer half; d)SIH-split on inner half.

Fig. 38-shows a section of the liner. a) SLSI-Sliding strip inner b) SISO-Sliding strip outer; c) iq-inner quarter

Fig. 39-shows a section of the split ends of the liner.

Fig. 40-shows the exploded isometric view of a sleeve and liner inner quarter. a)Szz-Split zig-zag

Fig. 41-shows the exploded isometric view of a sleeve, vane and liner inner quarter.

Fig. 42.shows the exploded isometric view of two sleeves and liner inner quarter, with vanes fitted in place.

Fig. 43-shows the isometric view of the sleeve, vane and liner inner quarter.

Fig. 44-shows the exploded isometric view of the outer half of liner and sliding ring, sleeve, vane and liner inner half. a)czz-zig-zag liner outer half cut b)Srg-slip ring

Fig. 45-shows the exploded isometric view of the components in the previous Fig 44 and the casing. a)csg-casing b)ins-insert c)liq-liner inner quarter

Fig. 46-shows the isometric view of cam and valve operating cam fitting on the sleeve. a)Cal-valve operating cam

Fig. 47-shows the isometric view of complete vanc assembly fitted on to sleeves with cams, valve operating cams and fuel pump operating cams. a)fpc-fuel pump cam

Fig. 48-shows the top view of the machine, with two parts of liner outer half over the fitting shown in Fig. 47. aa)bprsg-Bolts pressing sealing ring

Fig. 49-shows the elevation of components arrangement shown in previous Fig 48 along with shaft and sliding friction clutch.

Fig. 50-shows machine with casing in place.

Fig. 51-shows the side view of the machine with shaft arranged as in two stroke version of the engine.

Replace the paragraphs [0030], [0031], [0032] and [0034] with the following:

[0030] The basic parts are Sleeves, Liner, Vane, Cams and Coupling. Considering the Sleeves, there are two numbers of sleeves. A hollow cylinder of outer diameter 'd', length 'l' and thickness 't' depicts these sleeves. Hereafter, the two sleeves are referred to as S1 and S2.

[0031] The Sleeves are depicted in Fig. 1. Considering the Liner, the liner is depicted by hollow cylinder of inner diameter "D", length by "L" and thickness "T" with circular cover plates on both ends. The cover plates have a hole of diameter "d". (The whole diameter is the same as that of the sleeve's outer diameter). The liner is depicted in Fig. 2.

[0032] Considering the Vanes, there are two numbers of Vanes. The vanes are depicted by a rectangle plane of length "L" and width "r" such that $r = (D-d/2)$. Hereafter the two vanes are referred to as V1 and V2, as shown in Fig. 3.

[0034] The V1, S1 fitting is here referred to as VS1. The V2, S2 fitting is here referred to as VS2. The Vane and Sleeve fitting is depicted in Fig. No. 4.

Replace paragraphs [0055] and [0056] with the following:

[0055] These components include a Shaft, Cams and associated linkages, Sliding friction clutch and Brake bands. The shaft is of length "A" and diameter "B" (such that "A" is greater than 2

times "I" and "B" is less than $\{d' - t'\}$ are dimensions of the sleeve). The shaft passes through the hollow annular space in the sleeves and protrudes out of the ends. It is depicted in Fig. 13.

[0056] Considering the Cams, two cams are used, one fitted on each sleeve.